

Daily Report

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Research

Last two days I was working on adding necessary features to the demo including color mapping and highlighting, etc. Temporarily the demo can be accessed at <http://10.76.0.194:8080/static/index.html>. It has been tested under newer versions of Chrome Web Browser.

- **The PCP View** Figure 1 is the interface of PCP view. First it is necessary to click “Refresh Data and Settings” to generate the view. Then the options in “Color mapping” and “Highlighting” can be activated to obtain corresponding effects. Currently only Iris Dataset is available to use.

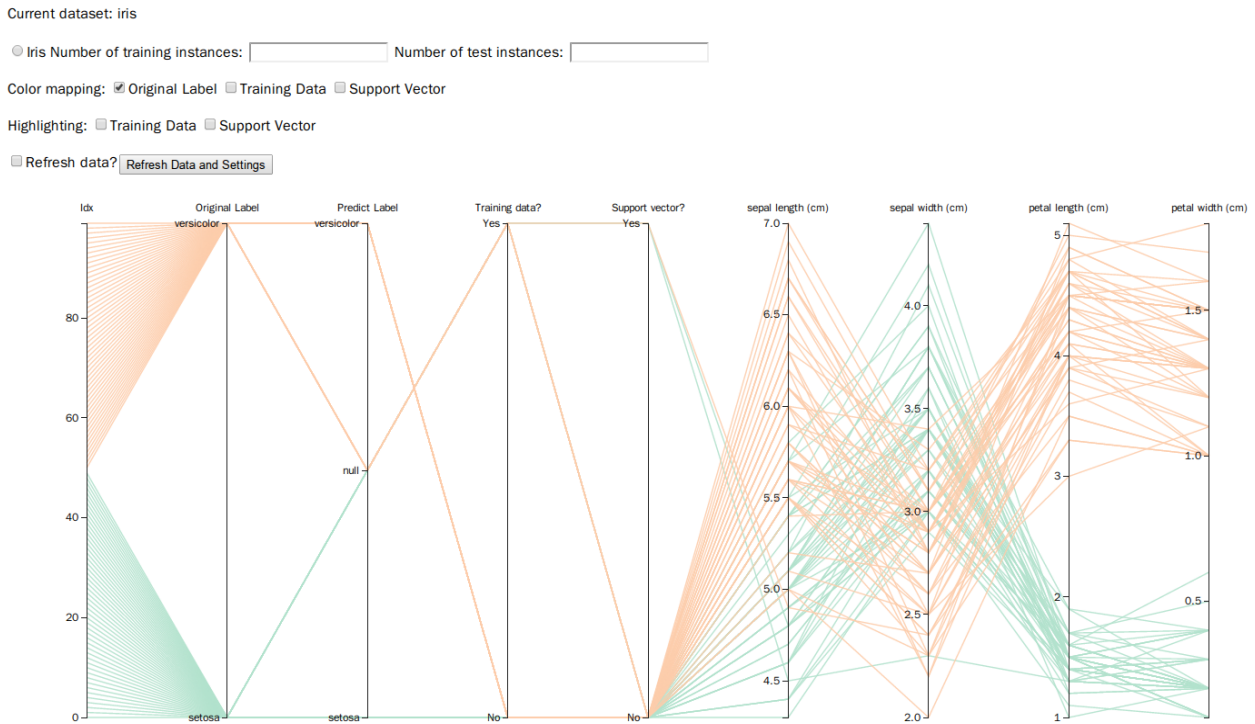


Figure 1: PCP view (settings: “Color mapping” - “Original Label” on). Two original classes are mapped to two different colors.

- **Some Findings** Figure 2 is a result of highlighting support vectors in training data (the brush on the axis of “Training data?” means that only polylines of training data left in the PCP). In SVM it means that these support vectors are training data along the

decision boundary. Also these support vectors seem to be boundaries on some features like “petal length”.

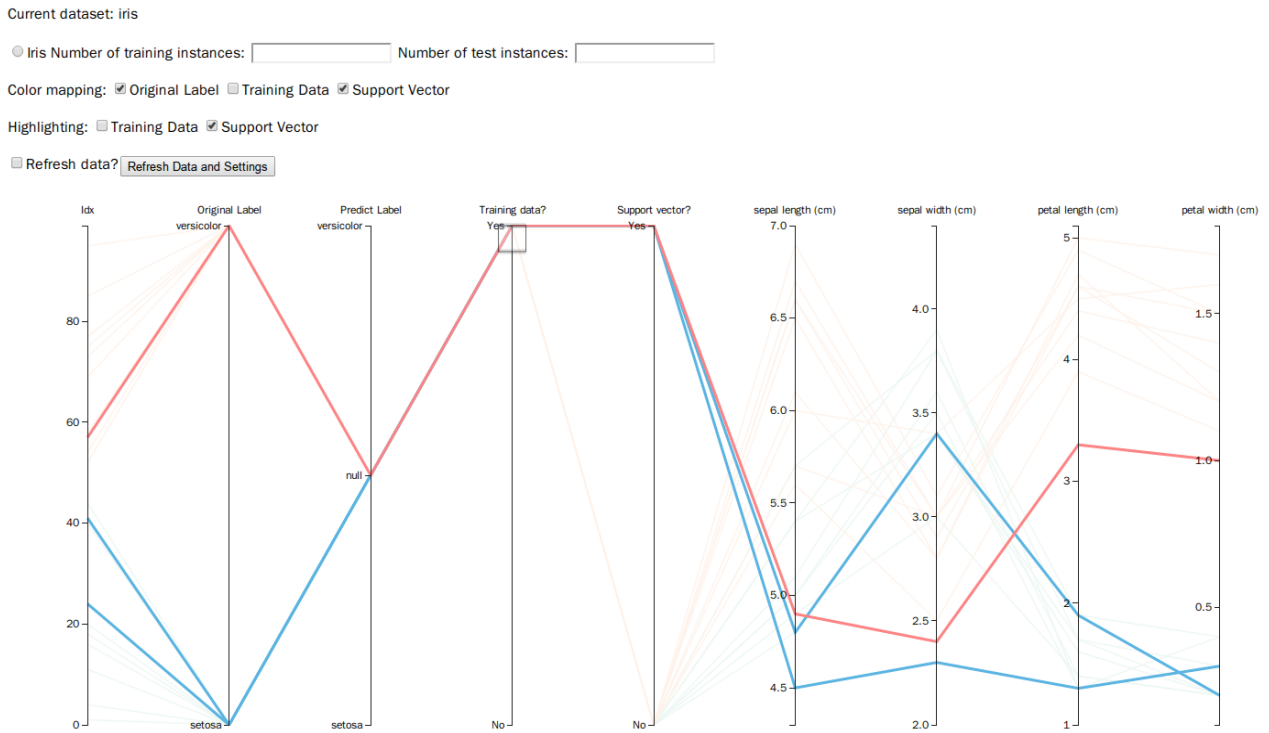


Figure 2: PCP view (settings: “Color mapping” - “Original Label” on, “Support Vector” on; “Highlighting” - “Support Vector” on; Brush - Training data).

Plan for Tomorrow

- Finish MDS view;
- write a report to Prof. Tung to illustrate current process.